UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,962	01/17/2001	John R. Douceur	MSI-712US	7117

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EXAMINER
POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/764,962	DOUCEUR ET AL.
	Examiner	**Art Unit**	
	Peter Poltorak	2134	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-26,29-39,41,47-54,60-64,67,69-81 and 87* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-26,29,30,37-39,41,47-50,54,60-64,67,69-73,80,81 and 87* is/are rejected.

7)☒ Claim(s) *31-36,51-53 and 74-79* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment, and remarks therein, received on 7/14/2005 have been entered

    and carefully considered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be

    found in a prior office action.

Response to Amendment

3. In light of Applicant's amendments and clarifications the 35 USC § 101, 112 1st and

    2nd paragraph rejections have been withdrawn.

4. The amendment to the specification has been entered.

5. Applicant argues the 35 USC § 103 rejection stating that the provided art is not a

    useable reference against the present application and requests that the rejections be

    withdrawn.

6. Applicant's arguments have been carefully considered but they were not found

    persuasive. The examiner points out that whenever a web material is printed often

    the printer prints the reference URL and the current day at the bottom of the page.

    The date at the bottom of the art provided is the date the information was printed

    from the web.

7. The date that the reference was available to the public was Jun 5, 1997 as shown in

    the Internet Archive http://www.archive.org/web/web.php, the reference of which

    (ICU's Section 4: The Unix Shell) the examiner once again provides to applicant, this

    time directly printed from the Internet Archive.

8. Also, the examiner points out that upon visiting the main URL reference provided in

the previous Office Action (http://www.isu.edu/departments/comcom/unix/workshop/)

one is presented with dates when documents were last modified. The examiner

draws applicant's attention to the attached document (and encourages applicant to

visit the URL), wherein it is shown that the original dates of the documents of interest

are not later than the year 1996.

9. Lastly, the examiner points out that the ISU reference is discussing the

fundamentals of UNIX operating systems, which were in place, utilized and known

well before 2001.

10. Applicant argues that no art rejection has been offered for claims 31-36, 51-53 and

74-79.

11. As pointed out in the conclusion of this Office Action, the rejection regarding claims

31-36, 51-53 and 74-79 has been withdrawn. However, the claims remain objected

to as being dependent on rejected claims 19, 48 and 67. Claims 31-36, 51-53 and

74-79 would overcome the art of record if rewritten in independent form.

12. Claims 19-26, 29-39, 41,47-54, 60-64, 67, 69-81 and 87 have been examined.

Claim Rejections - 35 USC § 103

13. Claims 19-20, 25-26, 29-30, 37-39, 41-43, 47-48, 50, 54, 60-64, 67, 70-73, 80-81

and 87 remain rejected under 35 U.S.C. 103(a) as being unpatentable over *ISU*

(*http://www.isu.edu/departments/comcom/unix/workshop/*) in view of *Olkin et al.*

(U.S. Pub. 20030046533) and in further view of *Official Notice.*

14. As per claims 19-20 and 25-26 *ISU* teaches Unix operating system wherein files and

directories are created using characters *(Section 4: The Unix Shell, Special*

characters in Unix segment). Since file or directory is created by intercepting

characters typed by a user, the *ISU* teaching reads on receiving an identifier.

Furthermore *ISU* teaches limited set of characters *(command names, Section 4: The*

Unix Shell, CONCEPT segment) and *special* characters *(Section 4: The Unix Shell,*

Special characters in Unix segment). *ISU* does not explicitly teach generating,

based on the identifier, a mapped identifier; however it would have been obvious to

one of ordinary skill in the art at the time of applicant's invention to generate a

mapped identifier *(validate file/directory name)* since *ISU* explicitly warns about use

of the special characters and their meaning to the operating system *(Section 4: The*

Unix Shell, Special characters in Unix segment). The purpose of mapping is to

prevent identifier causing unexpected results. Thus encoding *(storing the file name*

in the computer code) only if the received identifier was syntactically legal *(being*

other than command name or special character) is implicit.

ISU does not teach encrypting the encoded identifier. *Olkin et al.* teaches encrypting

the encoded identifier *(Olkin et al. [74]).* It would have been obvious to one of

ordinary skill in the art at the time of applicant's invention to encrypt the encoded

identifier as taught by *Olkin et al.* One of ordinary skill in the art would have been

motivated to perform such a modification in order to provide security *(Olkin et al. [83])*.

In addition, using an encryption process that produces a unique encrypted encoded identifier would be implicit as it is old and well-known practice to search for files by a unique identifier given the benefit of a selective file recall.

15. As per claims 37-39, 54 and 80-81 *ISU* in view of *Olkin et al.* do not explicitly teach ciper block chaining to encrypt the encoded identifier. However, the choice of DES-CBC for example as an encryption would have been obvious to one of ordinary skill in the art given that they are well known and barring any unexpected results. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to encrypt the encoded identifier using a cipher block chaining. One of ordinary skill in the art would have been motivated to perform such a modification in order to utilize well-known and proven encryption process.

16. As per claim 41 Unix runs on computers.

17. As per claim 29, 50 and 72 *ISU* teaches that shell accepts and executes commands which reads on checking whether the identifier is equal to one of a plurality of illegal identifiers. *ISU* further teaches that the command consists of command name followed by blank space and arguments *(command names, Section 4: The Unix Shell, CONCEPT segment)*. Using the identifier if it is not equal to one of the plurality of illegal identifiers followed by one or more particular characters is implicit.

If the identifier is not equal to one of the plurality of illegal identifiers, then checking whether the identifier is equal to one of the plurality of illegal identifiers followed by one or more particular characters is inherent.

18. Claims 30 and 73 *ISU* in view of *Olkin et al.* teach generating the mapped identifier as discussed above. *ISU* in view of *Olkin et al.* do not teach the particular character being removed comprising an underscore. Official Notice is taken that it is old and well-known practice to remove characters which are not letters in order to save space. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to remove the particular character comprising an underscore. One of ordinary skill in the art would have been motivated to perform such a modification in order to save space.

19. Claims 47-48, 60, 62-64, 67, 68-71 and 87 are substantially equivalent to claims 20-21 and 25-26; therefore claims 47-49, 60, 62-64, 67, 69-70 and 87 are similarly rejected. When two identifiers are encrypted it is not necessary to decrypt them in order to check whether they are identical.

20. As per claim 60 *ISU* do not explicitly teach communicating the encrypted directory entry to another device. Official Notice is taken that it is old and well-known practice to communicate the encrypted data to another device in order benefit from secure data exchange.

21. As per claim 61 *ISU* in view of *Olkin et al.* teach the computer readable media as discussed above. *ISU* and *Olkin et al.* do not explicitly teach a computer is part of a serveless distributed file system. Official Notice is taken that it is old and well-known

practice to include a computer in a serveless distributed file system to benefit of file

sharing.

22. Claims 21-24, 49 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable

over *ISU (http://www.isu.edu/departments/comcom/unix/workshop/)* in view of *Olkin*

et al. (U.S. Pub. 20030046533) and in further view of *Lamkin et al. (U.S. Pub.*

20020088011) and *Official Notice.*

23. *ISU* in view of *Olkin et al.* teach generating the mapped identifier. Furthermore, *ISU*

in view of *Olkin et al.* teach that UNIX unlike DOS is case-sensitive *(Section 4: The*

Unix Shell, EXPLANATION segment). *ISU* in view of *Olkin et al.* do not teach

generating, based on the mapped identifier, a decasified identifier and

corresponding case information. *Lamkin et al.* teach that files and directories must

be developed with case sensitivity in mind and recommend approach to use only

capital letters for all directories and file names *(Lamkin [87])* and provides an

example of decasifing characters *(forcing all characters to uppercase, Lamkin [83]).*

It would have been obvious to one of ordinary skill in the art at the time of applicant's

invention to decasify identifiers as taught by *Lamkin*. One of ordinary skill in the art

would have been motivated to perform such a modification in order to allow identifier

to be accessible and usable by a plurality of client device platforms *(Lamkin,*

Summary of the Invention and [83]). Generating corresponding case information is

implicit; the information about the original identifier must be kept for the case-

sensitive systems. It is also implicit to limit decasifing to only particular set of

characters. Some of the characters (e.g.) letters have their equivalent meaning when case is changed, and some others e.g. numbers.

Conclusion

Claims 31-36, 51-53 and 74-79 remain objected to as being dependent on rejected claims 19, 48 and 67. Claims 31-36, 51-53 and 74-79 would overcome the art of record if rewritten in independent form.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.
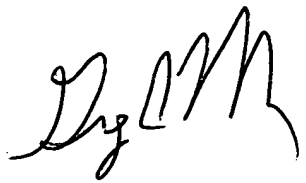
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at (866) 217-9197 (toll-free).

Signature

9/28/05

Date

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